DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-007633
Date Inspected: 30-Jun-2009

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 1900
OSM Departure Time: 700
Location: Shanghai, China

CWI Name: See Below

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG and Tower Fabrication

Summary of Items Observed:
CWI Inspectors: Mr. Liu Yang, Mr. Zou Liu Hai

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Tower Bay 10

This QA Inspector observed ZPMC welder Ms. Zhand Suqin, stencil 209051 using submerged arc welding procedure specification WPS-B-T-2221-B-U3C-S-2 to make groove weld NSD1-FCSA4-1A/F-10A and NSD1-FCSA4-1A/F-10A. The QA Inspector observed Quality Control (QC) Inspector Mr. Shi Jing Wei monitoring the maximum base material temperature with a 230 degree Celsius temperature indicating crayon. This QA Inspector measured a welding current of 630 amps and 31.2 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

OBG Bay 2

SEG 1AAE

This QA Inspector performed visual and magnetic particle (MT) inspections of the west end of Segment 1AAE

weld SEG2-035 for a distance of 870 mm between the two adjacent strand stiffener plates. Air carbon arc gouging spatter was observed on the end of this weld and it was removed and the area was MT'd. All MT appears to be accepted. QA did not mark a triangle on these welds pending ZPMC issuing an inspection notification sheet.

ZPMC tack welded strand stiffener plate welds SEG2F-005, SEG2C-086 and SEG2E-333on the east end of Segment 1AAE. See the photograph below. This QA Inspector performed root gap measurements of the fitup plate welds and the maximum root gap that was observed was 2.5 mm. This plate covers the welds between the end plate to the bottom plate where dayshift QA Inspectors had performed MT inspections. Dayshift QA did not mark a triangle on these welds pending ZPMC issuing an inspection notification sheet.

SEG 1AAE

This QA Inspector performed visual and magnetic particle (MT) inspections of the east end of Segment 1AAW base material where end and strand stiffener welds had been removed due to having excessive root gaps. The following weld removal locations were MT inspected:
SEG1D-002, 170; SEG1E-083; SEG1F-001
Items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer